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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,302	09/23/2003	Hidegori Shindoh	243008US2	9279
22850 7590 12/31/2007 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
			EXAMINER NGUYEN, ALLEN H	
			ART UNIT 2625	PAPER NUMBER
			NOTIFICATION DATE 12/31/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/667,302	<b>Applicant(s)</b> SHINDOH ET AL.	
	<b>Examiner</b> Allen H. Nguyen	<b>Art Unit</b> 2625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 October 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

- This office action is responsive to the following communication:  
Amendment filed on 10/11/2007.
- Claims 1-12 are currently pending in the application.

### ***Response to Arguments***

1. Applicant's arguments filed 10/11/2007 have been fully considered but they are not persuasive.
2. With respect to applicant's argument that color conversion circuit 304 of Tanio does not convert between a first format and second format, where each format is chosen from among a multi-value format.

In reply: It is noted that Tanio '389 does not disclose an image data converting unit configured to convert a format of image data from a first format to a second format, said first format and said second format each being one of a multi-value format.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Mizuyama '043. In particular, Mizuyama '043 teaches an image data converting unit configured to convert a format of image data from a first format to a second format, said first format and said second format each being a multi-value format (i.e., the device may output data in a data format other than multi-value data for each channel: the device may output data in RGB or

other formats that is can be converted to the aforementioned multi-value data and vice versa; see col. 31, lines 10-20).

In view of the above, having the system of Tanio and then given the well-established teaching of Mizuyama, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Tanio as taught by Mizuyama to include: an image data converting unit configured to convert a format of image data from a first format to a second format, said first format and said second format each being a multi-value format, since a such modification would provide a multi-vendor network environment documents may be sent from one user to another user wherein each user may utilize different document editors to work with the document. In situations in which each user desires to edit the document within a different format it is therefore necessary to provide document transformation applications which may be utilized to convert the document from an original document type to a second document type which is manipulatable by the receiver.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanio (US 5,930,389) in view of Mizuyama et al. (US 6,813,043).

Regarding claim 1, Tanio '389 discloses an apparatus for forming an image, in which hardware resources (103, 104, 223, 224, fig. 1) for use in the forming of the image are provided (a hardware circuit, col. 10, line 49), and a program runs in respect of the forming of the image (a module construction of the control program which operates on the CPU2 side, col. 8, lines 43-44, fig. 6, a module 701), said apparatus comprising:

a format unifying unit (101, fig. 1) configured to unify a plurality of formats of image data by utilizing said image data converting unit (i.e., there are a plurality of images of different image types, it is necessary to unify the types of all of the image data prior to printing; see col. 11, lines 54-56).

It is noted that Tanio '389 does not disclose an image data converting unit configured to convert a format of image data from a first format to a second format, said first format and said second format each being one of a multi-value format.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Mizuyama '043. In particular, Mizuyama '043 teaches an image data converting unit configured to convert a format of image data from a first format to a second format, said first format and said second format each

being a multi-value format (i.e., the device may output data in a data format other than multi-value data for each channel: the device may output data in RGB or other formats that is can be converted to the aforementioned multi-value data and vice versa; see col. 31, lines 10-20).

In view of the above, having the system of Tanio and then given the well-established teaching of Mizuyama, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Tanio as taught by Mizuyama to include: an image data converting unit configured to convert a format of image data from a first format to a second format, said first format and said second format each being a multi-value format, since a such modification would provide a multi-vendor network environment documents may be sent from one user to another user wherein each user may utilize different document editors to work with the document. In situations in which each user desires to edit the document within a different format it is therefore necessary to provide document transformation applications which may be utilized to convert the document from an original document type to a second document type which is manipulatable by the receiver.

Regarding claim 2, Tanio '389 discloses the apparatus, wherein said image data converting unit (Color Conversion Circuit 304, fig. 2B) converts formats of image data used by a copier (103, fig. 1), a printer (223, 224, fig. 1), a scanner (109, 110, fig. 1), and a facsimile (i.e., a copier 103 has the

transmission/reception function. Therefore, a copier 103 is also a facsimile; fig. 1, Transmission 103-2, Reception 103-1).

Regarding claim 3, Tanio '389 discloses the apparatus, wherein said image data converting unit (304, fig. 2B) converts a format of image data by resizing an image of the image data (i.e., each memory has a memory capacity corresponding to images of an original of the A4 size, by connecting the two memories, images of an original of the A3 size can be handled. Therefore, the conversion CKT has a function of resizing image data; col. 5, lines 35-37, fig. 2A, Frame Memory 201-202), compressing the image data (image compression, col. 9, line 7), decoding the image data (extension, col. 9, line 7), and attending to multi-value conversion of the image data (File ID, fig. 12).

Regarding claim 4, Tanio '389 discloses the apparatus, wherein said image data converting unit (304, fig. 2B) converts the format of image data by hardware (the color space converting process can be executed by a hardware circuit, col. 10, lines 48-49, fig. 2B).

Regarding claim 5, Tanio '389 discloses the apparatus, wherein said format unifying unit (101, fig. 1) unifies the plurality of formats of image data into one of the plurality of formats (three image types are converted and the image data is stored into the file by the same image type, col. 12, lines 3-5, figs. 17A-17C).

Regarding claim 6, Tanio '389 discloses the apparatus, wherein said format unifying unit (101, fig. 1) includes a conversion executing unit which converts the image data by utilizing said image data converting unit according to a unified format (image input/output tasks of different control types such as CLC type, FS type, and the like can be operated according to the connected device, col. 10, lines 11-13).

Regarding claim 7, Tanio '389 discloses the apparatus, wherein said format unifying unit (101, fig. 1) includes a plurality of conversion executing units (223, 224, fig. 2A), one of which is said conversion executing unit (303, 304, 305, 306 and 307 of 223, fig. 2A), and others of which are identical to said conversion executing unit (303, 304, 305, 306 and 307 of 224, fig. 2A).

Regarding claim 8, Tanio '389 discloses the apparatus, wherein said format unifying unit (101, fig. 1) assigns the plurality of conversion executing units (the masking color processing circuit 305, fig. 2A) to respective images (the masking color processing circuit 305 executes image editing processes such as masking, UCR operating process, and the like according to the color reproducing characteristics of the color copying apparatus 103, col. 6, lines 29-32), thereby converting image data of the images (in order to accurately reconstruct the image, col. 6, line 33).



Regarding claim 9, Tanio '389 discloses the apparatus, wherein any given one (color conversion circuit 304, fig. 2A) of said conversion executing units converts image data of a corresponding one of the images (in case of layout-printing three images of different image types, col. 11, lines 56-57, fig. 17A) by utilizing said image data converting unit if a format of the image data of the corresponding one of the images is different from the unified format (fig. 17B).

Regarding claim 10, Tanio '389 discloses the apparatus, further comprising a consolidated printing unit (Color Conversion CKT 304, fig. 2B) which consolidates and prints images (the resultant data is outputted to a desired output device, col. 12, lines 7-8) whose formats are unified by said format unifying unit (it is necessary to unify the types of all of the image data prior to printing, col. 11, lines 55-56).

Regarding claim 11, Tanio '389 discloses the apparatus, wherein said format unifying unit (101, fig. 1) notifies said consolidated printed unit (CLC103/104, fig. 1) that image data is ready for consolidated printing if said format unifying unit completes unification of the formats of image data after conversion of at least one of the formats or because of no need for conversion of at least one of the formats (in step S50, col. 11, line 20).

Regarding claim 12, claim 12 is the method claim of device claim 1. Therefore, method claim 12 is rejected for the reason given in device claim 1.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Narita et al. (US 5,694,580) discloses method of converting data and device for performing the method.

Kagawa (US 6,222,645) discloses facsimile apparatus and communication method therefor.

Yamada et al. (US 6,268,931) discloses density separation for multi-density printing.

Namizuka (US 6,934,057) discloses image-processing device independently controlling each of functions that correct density of image.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen H. Nguyen whose telephone number is 571-270-1229. The examiner can normally be reached on M-F from 9:00 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571)-272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AN

12/19/2007

A handwritten signature in black ink, appearing to read 'K. Y. Poon', written in a cursive style.

KING Y. POON  
SUPERVISORY PATENT EXAMINER